



The Business of Sustainability

MDEQ SUSTAINABILITY WEBINAR SERIES

FEBRUARY 18, 2016

NATALIE PRYDE, T&M ASSOCIATES AND MARYANN SANDERS, HALEY & ALDRICH



Sustainability Series

WEBINARS



Pollution Prevention and Stewardship Unit, Office of Environmental Assistance
Department of Environmental Quality

Helping people through positive environmental change

We advance voluntary, multi-media environmental, social, and economic improvement using scientific, collaborative solutions to achieve a healthy and sustainable environment.

www.michigan.gov/deqp2



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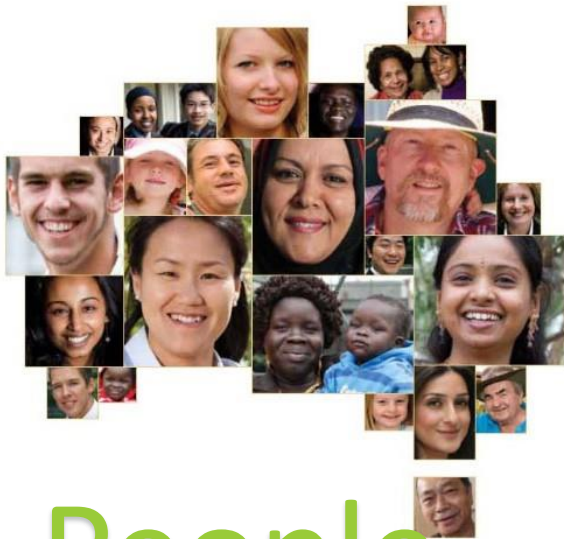
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Environment



People



Sustainability



Business

Business



Governance

Sustainability and the Environment



Environmental Challenges

- ❑ Climate change risks
- ❑ Environmental accidents and remediation
- ❑ Water quality and management
- ❑ Energy management
- ❑ Fuel sources and transportation
- ❑ GHG emissions and air quality
- ❑ Waste management and effluents
- ❑ Biodiversity impacts

Environment's Impact on Profits

- ❑ Cargill reported a 12% drop in 2014 Q4 profits due to droughts in the US southwest
- ❑ GrainCorp (Australia's largest agribusiness) reported a 64% drop in 2014 profits due to drought that reduced grain deliveries by 23% and 50% reduction in grain exports
- ❑ Unilever estimated that natural disasters linked to climate cost the company \$400 million annually



PROFIT AT RISK FROM NATURAL CAPITAL IMPACTS

Total environmental costs as percent of net income.



Environmental and Social Stewardship can Enhance a Business Model

Unilever:
\$52.37B

In 2014
Revenues



Unilever Sustainable Living Plan

**Sustainable sourcing of
agriculture raw materials**

**Manufacturing reductions in
waste, emissions, and water
abstraction**

Reduce by half their environmental
footprint by 2020

Increase their positive social impact

55% in 2014 vs 14% in 2010

37% reduction in CO2 emissions (energy)

Water abstraction down 32%

Total waste sent for disposal down 85%

Sustainability and People

CONSUMERS



EMPLOYEES



What drives Consumers?

- ❑ 70% of consumers are “consciously searching” for greener products
- ❑ 87% hold business interests equal to society’s needs
- ❑ Positive social or environmental purpose increased intent to purchase by 8% and likelihood to recommend by 12%



OLD CONSUMER

NEW CONSUMER

Lowest Price



Total Value

Waiting for solutions



Creating solutions

Asks, "What's in it for **me**?"



Asks, "What's in it for **we**?"

Trusts marketing messages on package



Looks at ingredients on back of box

Passive recipient of brand communications



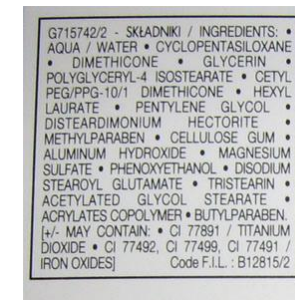
Active co-creators of brand communications

Price

Value



\$



Consumer Marketing via Social Media

- ❑ 50% have used social platforms to express concerns or complaints
- ❑ 53% have used social platforms to compliment brands they like
- ❑ 46% of Global users use social media to help make purchase decisions



Today your brand is built on Actions not Advertising.

Employees: Engaging the Team

- ❑ Recruit for attitude and philosophical alignment to your company's mission
- ❑ Motivate around a sense of purpose
- ❑ Build a team that is diverse, properly skilled, and tenacious problem solvers
- ❑ Develop robust training programs and cultivate an environment of collaboration and comradery
- ❑ Find people that think like an entrepreneur or intrapreneur



Leadership: Guiding the Team

Leaders with:

- ❑ Authority and decision making ability
- ❑ Conviction and commitment to the purpose
- ❑ Courage and tenacity
- ❑ Ability to think outside the box



Sustainability and Business



Sustainability as the Purpose

- ❑ *Embrace Sustainability* as an opportunity
- ❑ *Embed Sustainability* into the organization
- ❑ *Empower Leadership* that is committed to the purpose
- ❑ *Invest in Innovation*
- ❑ *Cultivate Relationships* with your suppliers and develop collaborative teams around innovation and purpose
- ❑ *Understand the Product Life Cycle*

Effect on the Investment

- ❑ Companies are being scored based on sustainability data
- ❑ Investors are making decisions based on sustainability data
- ❑ “High sustainability” companies out performed “low sustainability” companies by 4.8%
- ❑ Stock price is positively impacted by good sustainability practices



Business Accountability and Reporting

More and more companies are reporting sustainability goals and results.



Innovation: Creating a Product that is Greener AND Better

- ❑ Invest in natural capital and/or innovation
 - *Innovation may be disruptive*
- ❑ Develop business plans built around extensive data driven scenarios
- ❑ Cultivate strong partnerships and relationships that share innovations
- ❑ Nurture a culture where innovation is pervasive
- ❑ Pursue perfection without the fear to tackle the counterintuitive



Case Study: Significance of a Mission Statement

FISKER

“To lead the automotive industry into the next generation of automobiles with high-end design expertise and eco-friendly powertrain technology.”

Product: High end hybrid electric vehicle

Launched in 2009-2011 time frame

\$102,000 - &109,000 price point

Declared bankruptcy in 2013

TESLA

“To help expedite the move from a mine-and-burn hydrocarbon economy toward a solar electric economy.”

Product: High end fully electric vehicle

Launched in 2009-2011 time frame

\$102,000 - &109,000 price point

Market cap of \$28.35 Billion

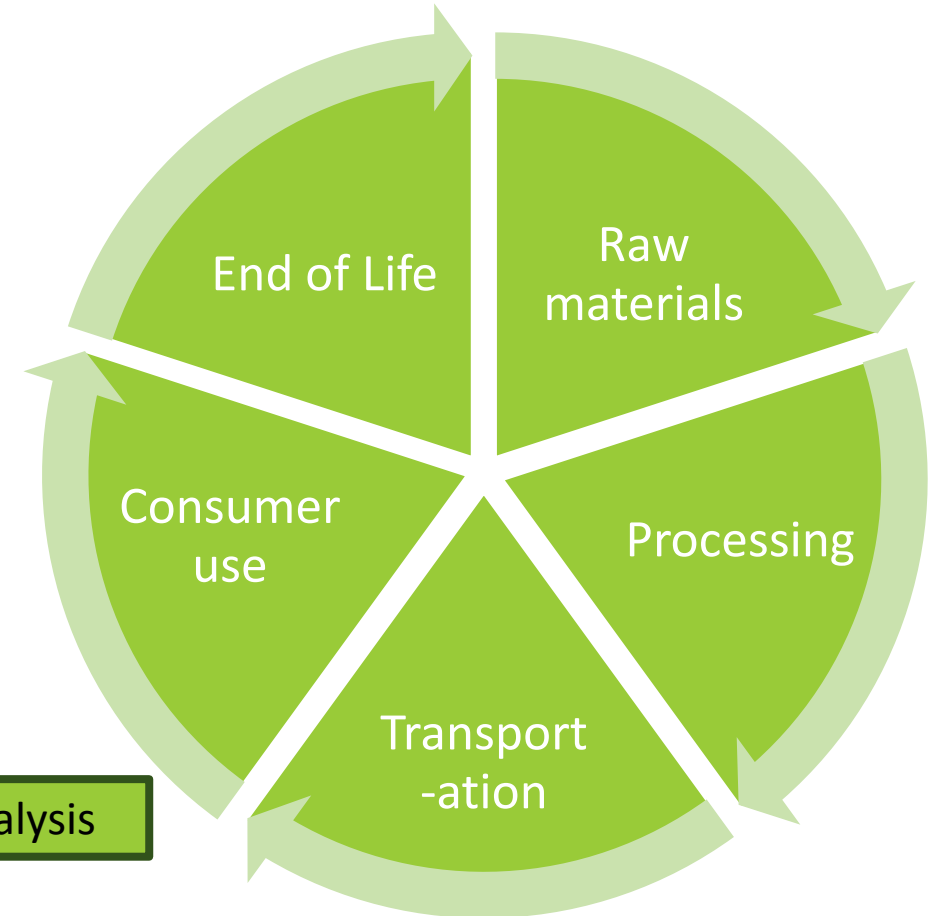
Life Cycle Assessment:

A tool to assess a product or process

What is driving the process?

- 1) **Government** regulations, which make manufacturers responsible.
- 2) **Business** participation in voluntary initiatives to drive product stewardship goals
- 3) **Consumers** are driving environmentally preferable products

Requires both an Impact Assessment and an Improvement Analysis



Bio-based Fuels are Better than Fossil Fuels



FACT



Bio-based are Better than Fossil Fuels:

BENEFITS OF BIO-BASED FUELS:

- Climate neutral
 - Absorbed CO₂ during growth offsets CO₂ generated in other phases
- Renewable resource
- Addresses social issues through rural development and employment

DOWNSIDE OF BIO-BASED FUELS:

- Production of biomass requires fertilizers...fertilizers are manufactured using fossil fuels
- Requires land use
- Requires pesticide use

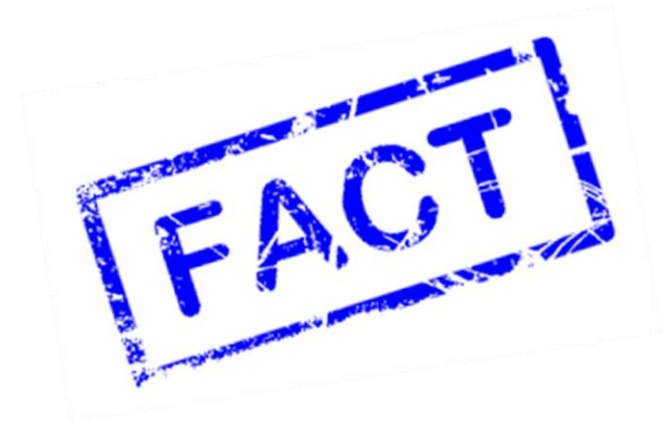


Single-use Corrugated Containers are a Sustainable Product

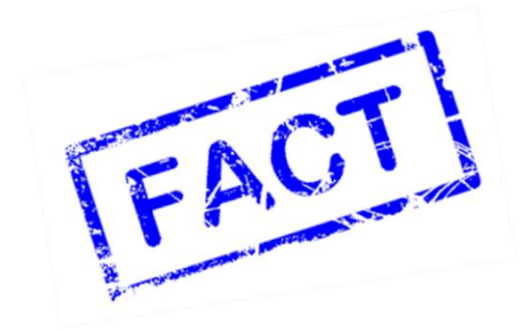
Are single-use corrugated boxes destroying our forests?

What happens to all of those boxes?

Are they filling up the landfills?



Single use Corrugated Containers are a Sustainable Product



Levi Strauss & Co.TM - Case Study (2007)

Lifecycle Assessment on two core products: Levi's[®] 501[®] jeans and Docker's[®] khakis

49% of water is
used during cotton
growing process

45% of water is
used during
consumer care

58% of energy use
and green house gas
emissions from
consumer dryer use

Joined *Better
Cotton Initiative*

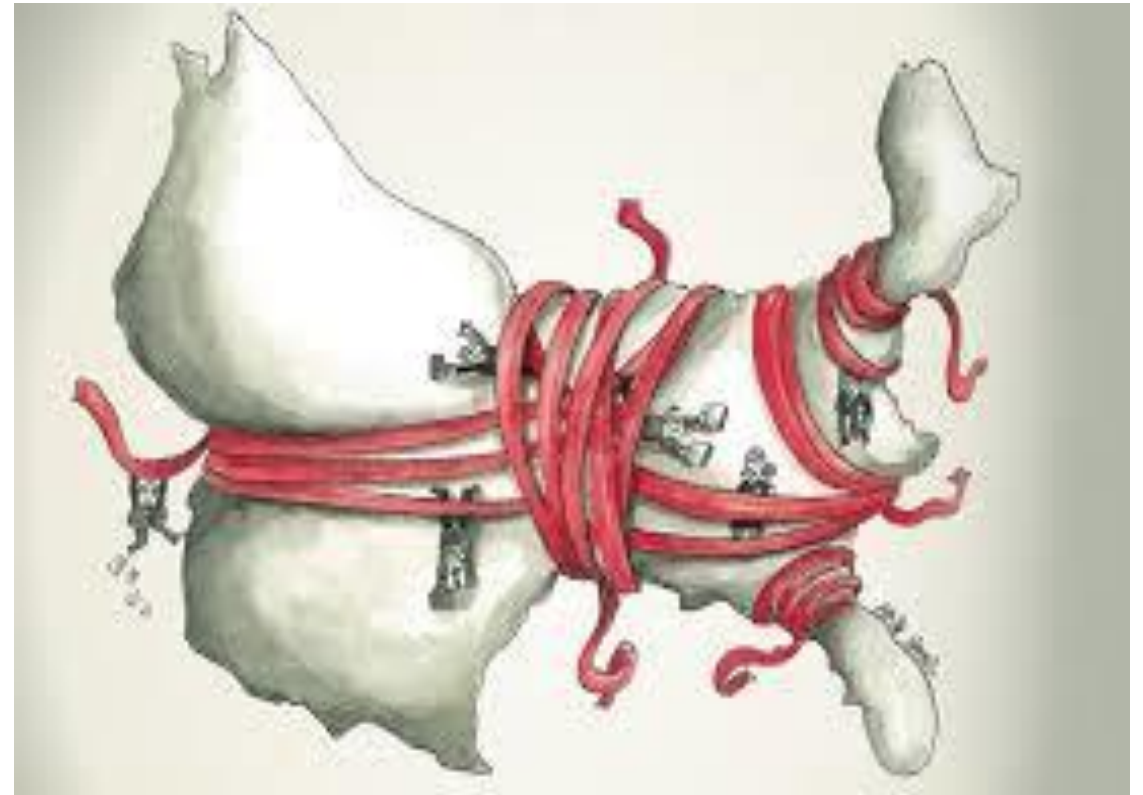
Launched
Care for Planet

Sustainability and Governance



Can Regulatory Efforts Drive Sustainability?

- ❑ Raise Awareness
- ❑ Force Industry Action
 - ❑ Legislative Action and Regulatory Implementation
 - ❑ Enforcement



Is There A Green Chemistry Crisis in the United States?



Green Chemistry Through Regulatory Action



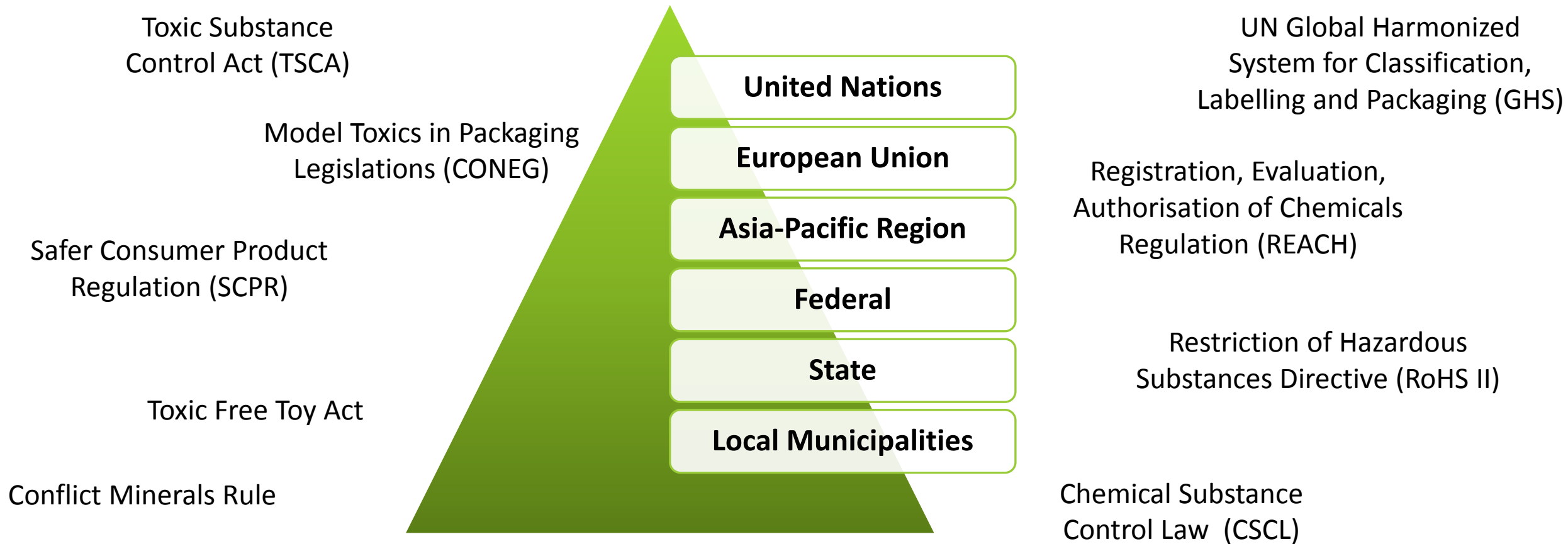
**Consumers are
demanding action.**



**Regulatory bodies are
answering the call.**



Governance in Support of Green Chemistry



California Department of Toxic Substances Control

– Bans to landfill



- ☐ No manufacturer take-back program established.
- ☐ Unfunded mandate for local municipalities to manage product at the end of life results.
- ☐ No consideration for recycling included in the actions.

Toxic Substance Control Act (TSCA)

- ❑ Enacted in 1976
- ❑ Testing required only when risk/exposure is identified
- ❑ Risk Assessments
 - Include a cost benefit analysis
 - Does not include assessment of sensitive subpopulations
- ❑ Minimal fees...and the revenue does not go to EPA

TSCA Reform – Generating a Compromise

- ❑ House Bill (HR2576): *TSCA Modernization Act*
- ❑ Senate Bill (SR697): *Frank R. Lautenberg Chemical Safety for 21st Century Act (S. 697)*

Congress committees are currently conferring to prepare a single piece of legislation to be submitted to President Obama in (early) 2016

International Chemical Control Regulations

All Since 2003...

Each Regularly
Being Revised!

Influential Activities



- ❑ United Nations Global Harmonized System for Classification Labelling and Packaging (2003)
- ❑ European Union Registration, Evaluation, Authorisation of Chemicals Regulation (REACH) (2007)
- ❑ Measures for Environmental Management of New Chemical Substances (China REACH) (2010)
- ❑ European Union Restriction of Hazardous Substances Directive (RoHS II) (2011)
- ❑ European Union Biocidal Product Regulation (2013)
- ❑ Korea Act on the Registration and Evaluation of Chemicals (Korea REACH) (2013)

Elimination of Toxics in the Workplace

- Multinational Aerospace Company

GOALS

- Reduce facility footprint
- Decrease products/process hazards
- Promote sustainability

PROCESS

- Assess chemical hazards
- Evaluate occupational exposure
- Consider ease of substitution
- Establish an objective system to remove toxic substances

RESULTS

- Eliminate Toxics
- Announce Standardized Sustainability Practices

The New Sustainable Economy



Focus on climate
and protection of
natural capital



Products and work
improve the life of
all people



Business embraces
technology and
collaboration



Governance and
accountability is a
shared
responsibility



Thank you

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